

Fig. 1

LINEAR VOICE COIL
CLOSED-ENDED ACTUATOR

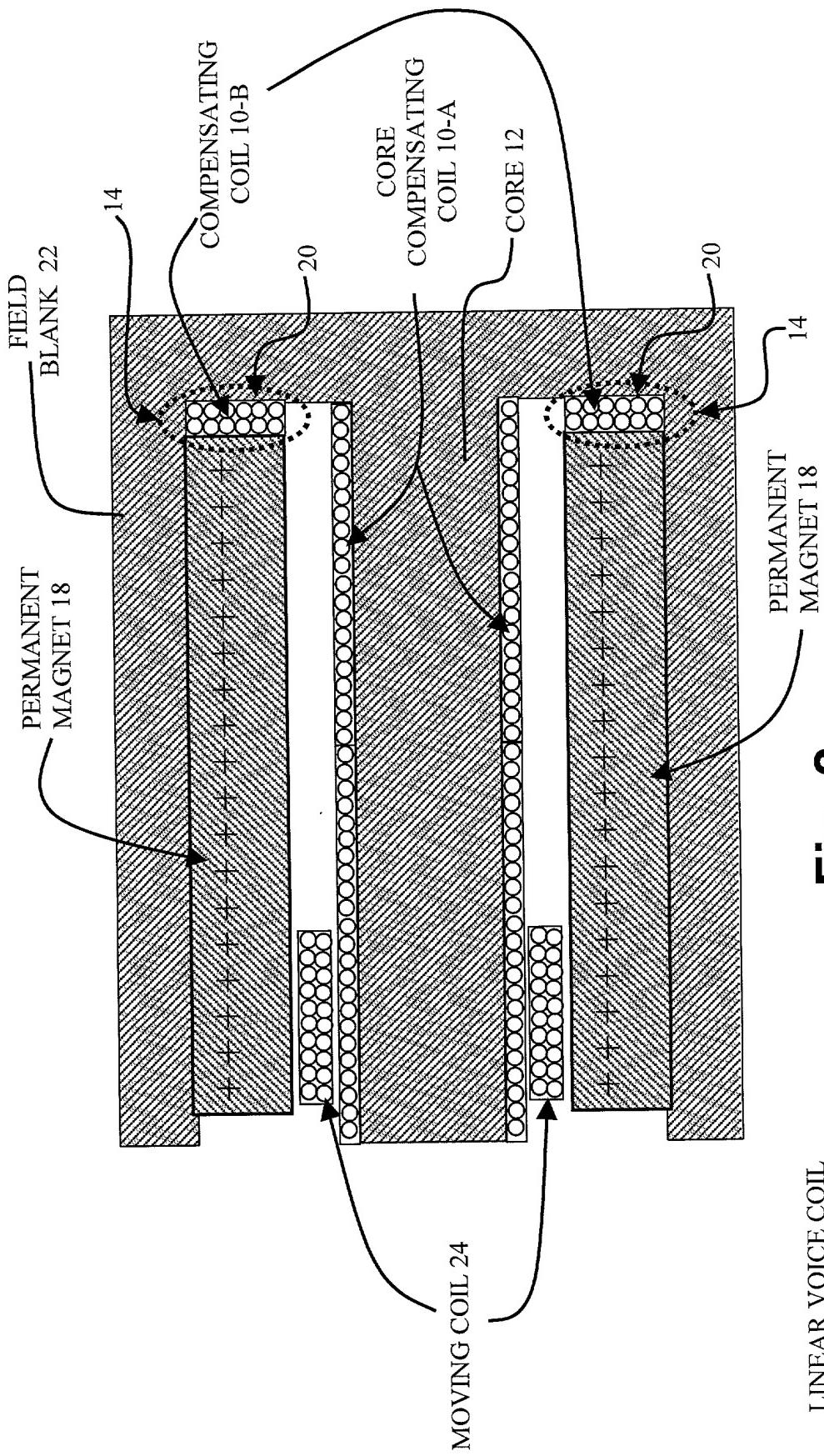


Fig. 2

LINEAR VOICE COIL
OPEN-ENDED ACTUATOR

Compensating coil MMF (Ampere-turns) vs. stroke
at constant force of a closed-ended linear voice coil actuator

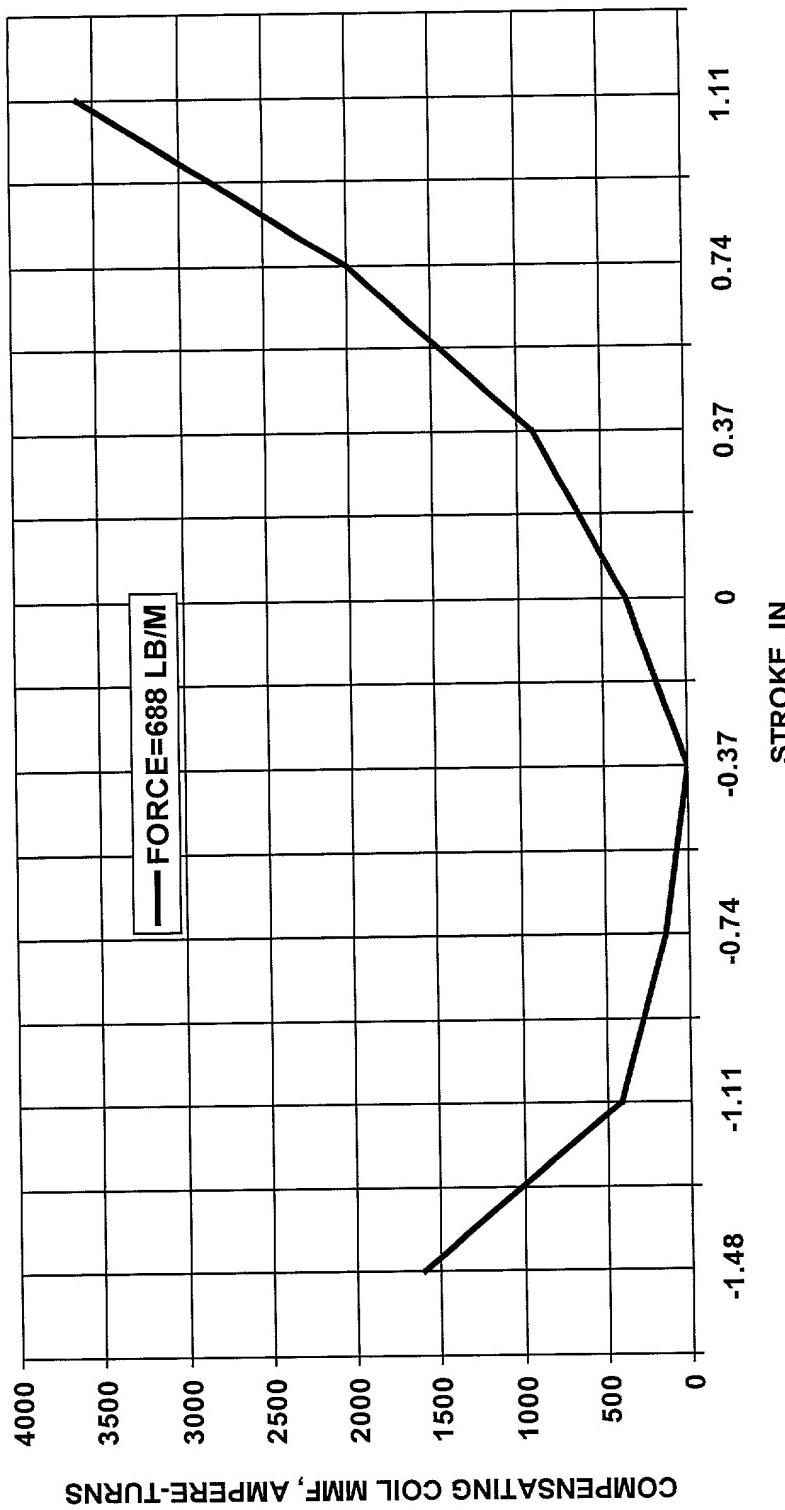


Fig. 3

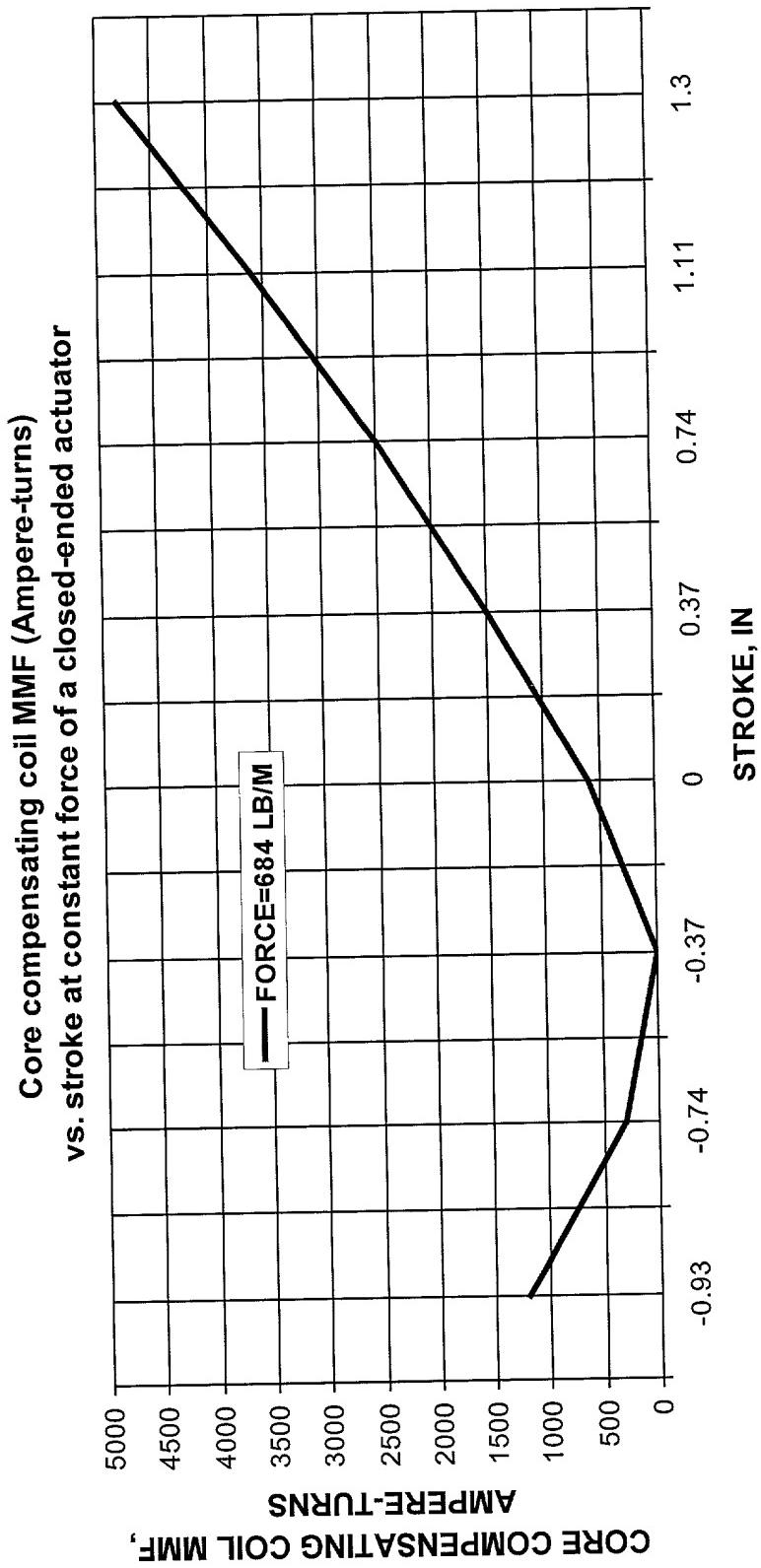
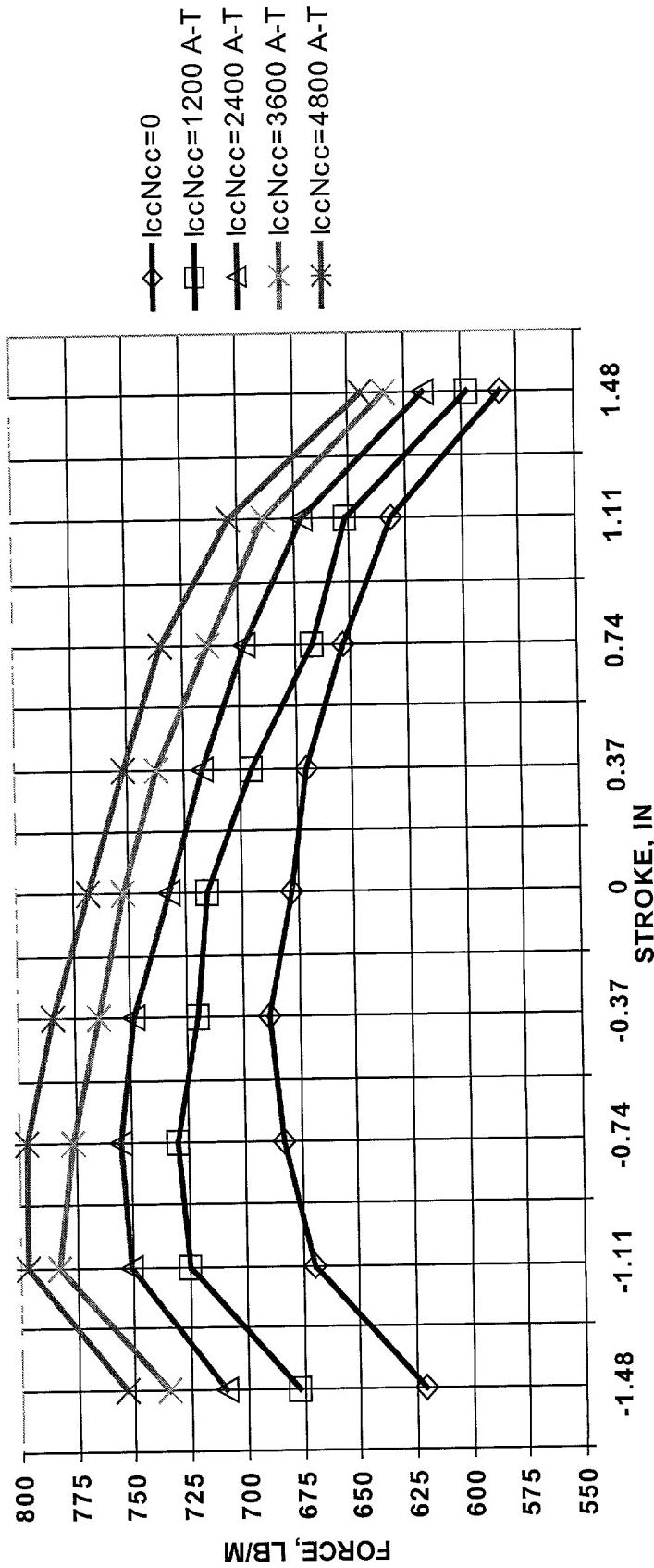


Fig. 4

Fig. 5

**Force vs. stroke at different compensating MMF (A-T) values
of a closed-ended linear voice coil actuator**



**Force vs. stroke at different core compensating MMF (A-T) values
of a closed-ended linear voice coil actuator**

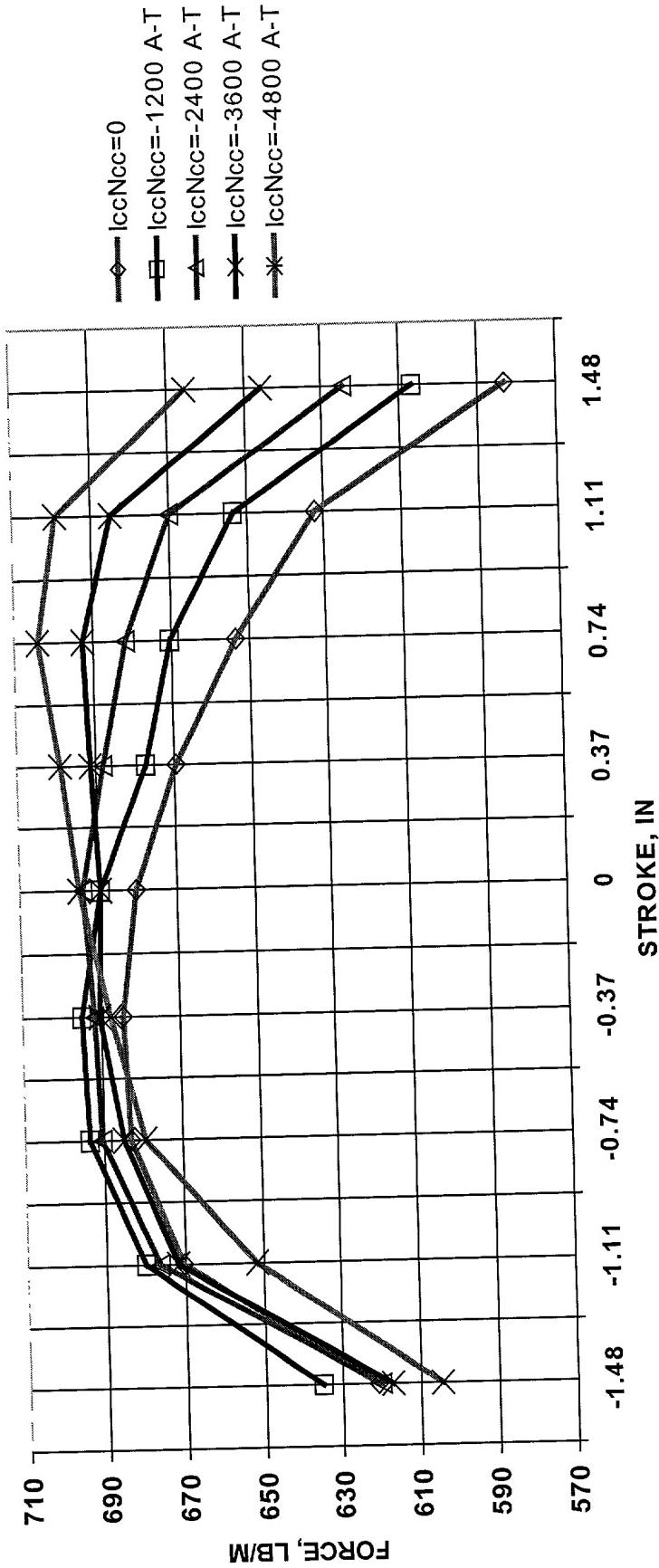


Fig. 6

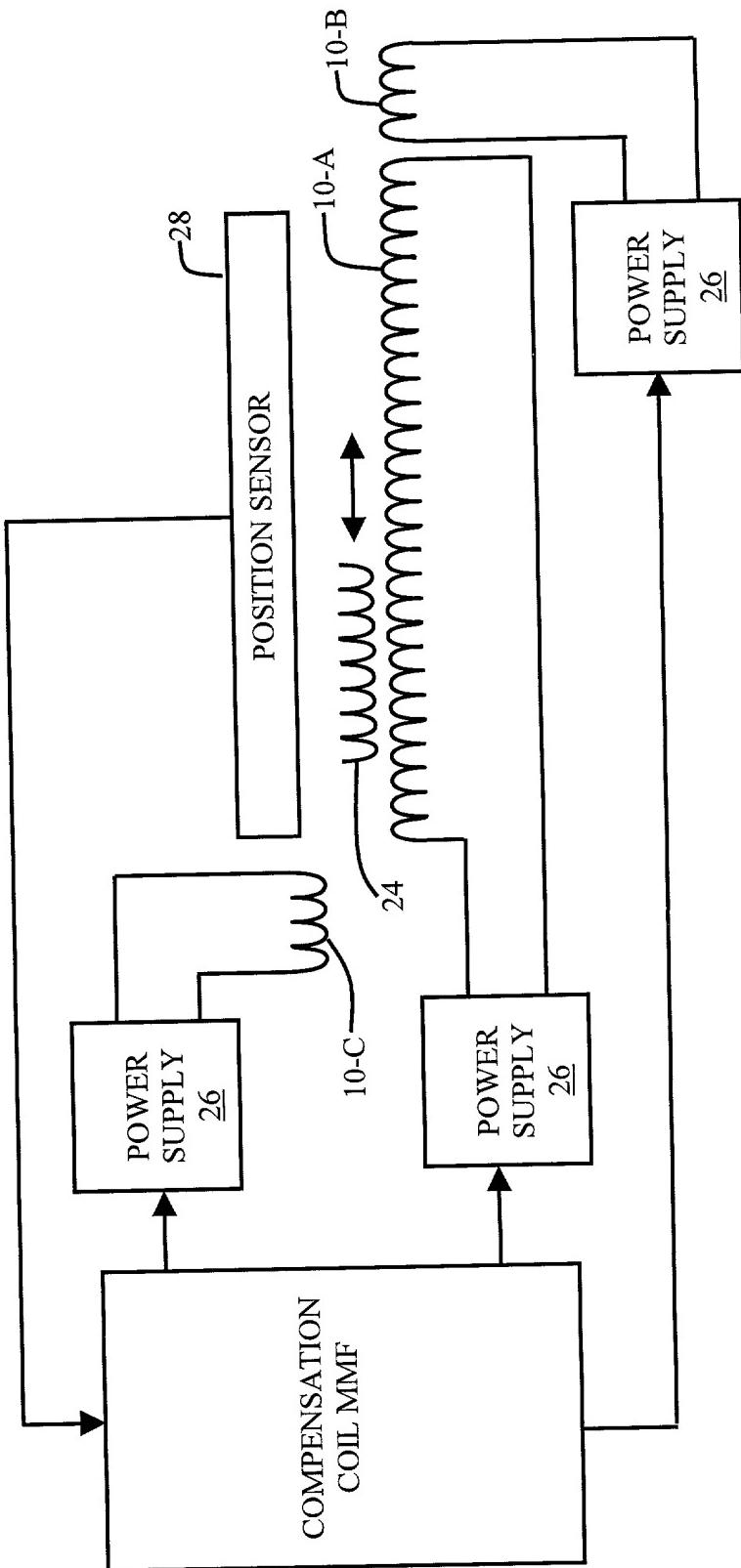


Fig. 7